

Report disperses migration myth

New research highlights the need for climate refugees to be considered in ongoing policy negotiations. **Anna Barnett** reports.

The first global survey of human migration driven by climate change suggests that most relocation will be regional rather than international in scale. The research, published 10 June as part of a report titled *In Search of Shelter*¹, dispels a common myth that the majority of climate refugees will arrive on the doorsteps of developed nations.

“There’s been a bit of political rhetoric saying we’re going to have waves of migrants at our doorsteps, rushing into Europe and North America,” says Koko Warner, the report’s lead author and an expert on migration and climate change at United Nations University in Bonn, Germany. “What we found is that the people whose livelihoods are most sensitive to the environment also tend to be the ones who may not have the means to move very far.”

From 2007 to 2009, social scientists from six European universities conducted surveys and case studies at 23 sites on five continents where migration is already taking place and questioned 2,000 local people about their reasons for leaving or staying. The research was part of a two-year European Commission-funded programme called Environmental Change and Forced Migration Scenarios (EACH-FOR). The new report combines the results of the EACH-FOR surveys with maps of anticipated climate change impacts created by Columbia University scientists (see Fig. 1), and is published with a number of collaborating organizations including the nonprofit Cooperative for Assistance and Relief Everywhere and the World Bank.

URGE FOR GOING

Although people often migrate briefly to escape natural disasters — such as flooding in Bangladesh’s Ganges delta — the main environmental drivers of long-term migration are those that ruin local livelihoods, finds the report. In parts of Niger, for example, drought and soil degradation can force farmers to move from village to village.

“We never planned to leave, but we just ‘crept’ after our living,” says one migrant. Another common pattern is repeated seasonal or ‘return’ migration, as seen with farmers in the highlands of Mexico who move across the border to the United States or migrate to Canada for short-term work when unreliable rainfall produces bad harvests.

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Koko Warner

Such trends seem likely to increase. “If environment already plays a role in migration, then as climate change accelerates you can expect to see more of that,” says Rafael Reuveny of Indiana University in Bloomington. Reuveny’s latest research² shows that emigration to

developed countries in the 1980s and 1990s was partly driven by environmental factors such as available agricultural land, as well as by war and poverty. The EACH-FOR research adds to the growing body of evidence that climate change is now starting to compete with such political and economic factors in driving migration.

FIGHT OR FLIGHT

Rather than trying to weigh the effects of different environmental drivers of migration, the EACH-FOR research focussed on whether migrants themselves perceived environmental factors as an influence on their choice to leave. “In the end, migration is a decision,” says Warner. “And what people think and their perceptions drive their decisions.”

The researchers also opted against estimating numbers of present and future environmental refugees. Recent studies have suggested that between 25 million and 1 billion people will be displaced by climate



Environmental degradation is becoming an increasingly common driver of migration.

change and environmental degradation by mid-century³, compared to today's total of approximately 200 million people driven from their homes by economic, political, environmental and other causes⁴. But Warner cautions against such hard figures. "There's no scientifically agreed methodology to come up with the numbers,"

says Warner. "We don't even have an agreed-on definition for environmentally induced migrants, and it's hard to measure something if you can't define it."

Despite uncertainty over the exact numbers, common estimates predict at least tens of millions of environmentally driven migrants in the coming decades — and

current systems for handling refugees don't have the capacity to take them on. "Strong early measures are necessary if we are going to avoid suffering," says ambassador Dessima Williams of Grenada, who heads the Association of Small Island States. "This is not a preferred adaptation strategy. People don't want to leave."

PART OF THE PLAN

Warner and colleagues are hoping that the document will have a decisive influence on negotiators who are meeting this week in Bonn, Germany, partly to wrangle over which issues will be included in a global climate treaty to be agreed in Copenhagen in December.

The authors hope to draw delegates' attention to four specific climate-related changes that are expected to displace increasing numbers of people this century: melting of glaciers that supply water to Asia, desertification in drylands, inundation and coastal vulnerability in major river deltas, and sea level rise in low-lying small island developing states.

Artur Runge-Metzger, the European Commission's chief climate negotiator, says that these threats should certainly be considerations for all parties as negotiations progress. "This information should become part of the debate," he says. The new report specifically calls for more adaptation investment so that fewer people are forced to migrate. But it also says that climate policy should support migration when it becomes the best or only option.

Owing to previous work by the EACH-FOR team, migration is already defined as a form of adaptation in the draft negotiating text being discussed in Bonn. The latest report may be just one more step towards a concrete plan to deal with climate refugees, but at least policymakers are getting the message, says Warner. "What we're creating here is a blueprint," she says. "The house will be built after Copenhagen. But [migration] is in the blueprint, which means we have a room in the house."

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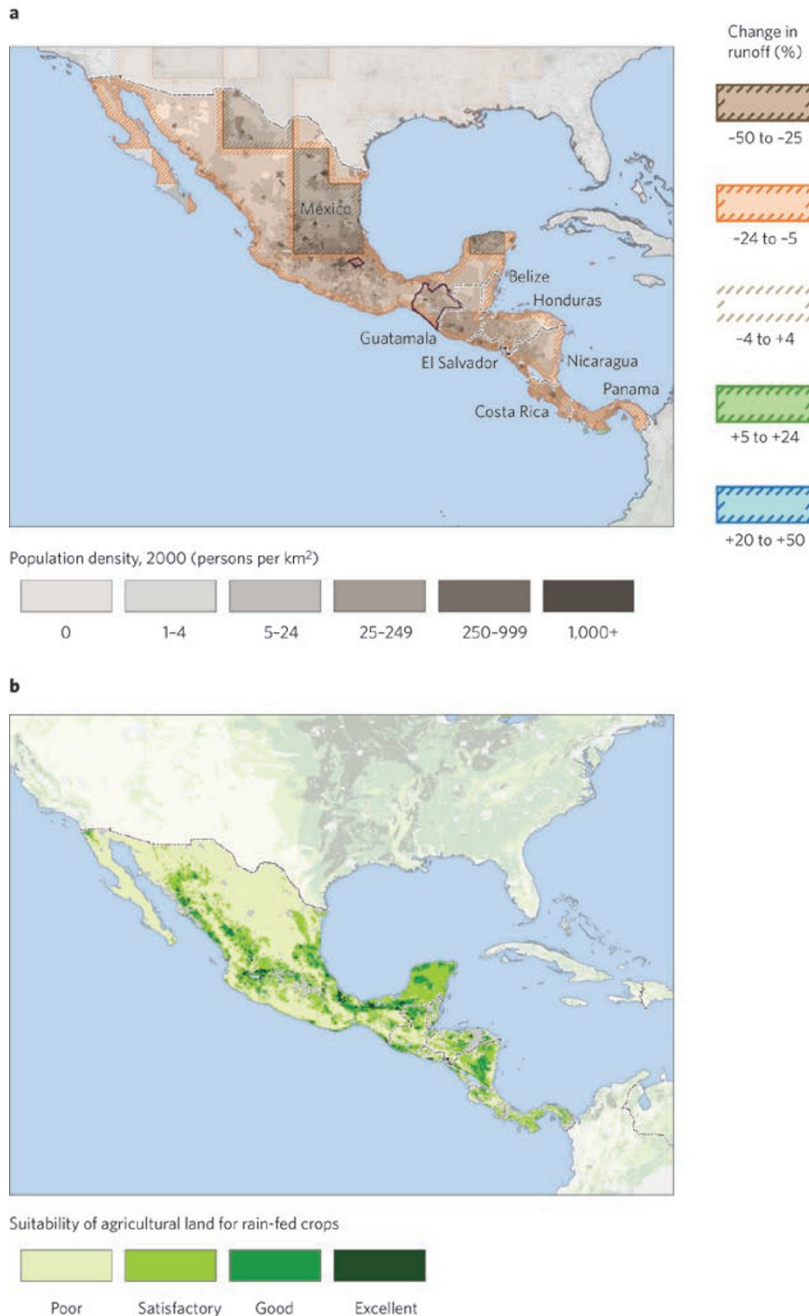


Figure 1 Farmers face drought. To accompany the EACH-FOR findings, researchers from Columbia University's Center for International Earth Science Information Network in New York created maps highlighting climate change impacts that could displace large numbers of people this century. (a) Projected changes in runoff by 2008 in Mexico and Central America. Some of the hardest-hit areas coincide with major population centers (shown by superimposed shading). Purple outlines indicate EACH-FOR study regions. (b) Land that today can be used for rain-fed agriculture, shown for comparison.